

Title (en)
HEAT TRANSFER SYSTEM AND METHOD OF OPERATING THE SAME

Title (de)
WÄRMEÜBERTRAGUNGSSYSTEM UND BETRIEB DESSELBEN

Title (fr)
SYSTÈME DE TRANSFERT DE LA CHALEUR ET OPÉRATION DE CE SYSTÈME

Publication
EP 2253893 A2 20101124 (EN)

Application
EP 10008700 A 20040930

Priority
• EP 04768706 A 20040930
• GB 0323370 A 20031006

Abstract (en)
A heat transfer system comprises a heat source 19; a heat load 8, 9; a heat exchanger 12 for transferring heat from said heat source to said heat load, the heat exchanger comprising: a hot side having an input 123 and an output 124 and a cold side having an input 121 and an output 122; temperature sensors 321, 322, 323, 324; 401, 402, 403, 404 placed to measure the temperatures of input and outputs of the heat exchanger 12; and a means for monitoring the thermal efficiency of the heat exchanger 12 that is arranged to calculate the thermal efficiency based on the measured temperatures; wherein a change in thermal efficiency of the heat exchanger 12 is determined by measuring the thermal efficiency at a first time and a second time; wherein the heat transfer system is arranged to predict when the heat exchanger 12 will reach a pre-determined thermal efficiency using the measured thermal efficiency values; and wherein the pre-determined thermal efficiency is determined based on the current heat exchanger 12 thermal efficiency and the temperature in a return to the heat exchanger 12.

IPC 8 full level
F24D 19/10 (2006.01); **F24D 18/00** (2022.01); **F28F 27/00** (2006.01); **F28G 15/00** (2006.01)

CPC (source: EP GB US)
F01K 3/00 (2013.01 - EP); **F01K 13/02** (2013.01 - EP); **F24D 11/005** (2013.01 - GB); **F24D 18/00** (2022.01 - EP GB US); **F24D 19/1066** (2013.01 - GB); **F28F 27/00** (2013.01 - EP); **F28G 15/003** (2013.01 - EP); **F24D 11/005** (2013.01 - EP); **F24D 19/0092** (2013.01 - EP); **F24D 2101/70** (2022.01 - EP GB US); **F24D 2103/13** (2022.01 - EP GB US); **F24D 2103/17** (2022.01 - EP GB US); **F24D 2200/26** (2013.01 - EP); **F28F 2200/00** (2013.01 - EP); **Y02E 20/14** (2013.01 - EP)

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US2022394880A1; US11744039B2; WO2015091778A1; EP3631592B1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2253893 A2 20101124; **EP 2253893 A3 20140618**; **EP 2253893 B1 20161102**; AT E495412 T1 20110115; DE 602004031038 D1 20110224; DK 1682826 T3 20110404; EP 1682826 A2 20060726; EP 1682826 B1 20110112; ES 2359706 T3 20110526; GB 0323370 D0 20031105; GB 2406901 A 20050413; GB 2406901 B 20071227; JP 2007507683 A 20070329; NO 20062033 L 20060706; RU 2006116469 A 20071210; RU 2337275 C2 20081027; RU 2376529 C1 20091220; WO 2005036060 A2 20050421; WO 2005036060 A3 20050804

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EP 10008700 A 20040930; AT 04768706 T 20040930; DE 602004031038 T 20040930; DK 04768706 T 20040930; EP 04768706 A 20040930; ES 04768706 T 20040930; GB 0323370 A 20031006; GB 2004004163 W 20040930; JP 2006530571 A 20040930; NO 20062033 A 20060505; RU 2006116469 A 20040930; RU 2008118391 A 20080512